

### REMARKS

Reconsideration of the present application is respectfully requested in view of the following remarks. Claims 1 and 39 have been amended, and 1-43 and 45-54

#### I. Election of Claims Under 35 U.S.C. §121

In the Office Action dated May 22, 2009, the Examiner required election under 35 U.S.C. § 121 between Claims 1-38 and 50-54 (Group I) and 39-49 (Group II). In response to the restriction requirement, Applicant provisionally elects with traverse to prosecute Group I, Claims 1-38 and 50-54, drawn to a pipe.

The first error in the restriction requirement made by the Examiner is that Claims 1, 50-51, and 53-54 are neither anticipated by nor obvious over U.S. Patent No. 5,514,312 ("*Hardy*") or U.S. Pat. Pub. No. 2001/0021426 ("*Procida*").

The Examiner's assertion that Claim 1 is obvious or anticipated by *Hardy* or *Procida* is unaccompanied by any analysis of that claim or of the supposed relevant teachings in either reference. For that reason, the applicant is unable to provide any specific rebuttal and, accordingly, traverses the asserted obviousness or anticipation.

Notwithstanding, the applicant provides the following comments on those two references in an effort to advance prosecution of the present application.

None of the prior art documents cited discloses a flexible pipe as defined in claim 1. In particular none of *Hardy* and *Procida* discloses a flexible unbounded pipe comprising at least one polymer layer having a thickness of at least 4 mm and

**-one film layer having a thickness of 1 mm or less,**

**-where the polymer layer being at least 10 times as thick as the film,**

**the film layer provides a fluid permeation barrier against one or more of the fluids methane, hydrogen sulphides, carbon dioxide and water, which is higher than the fluid permeation barrier provided by the polymer layer determined at 50 C and a pressure difference of 50 bars, and**

**-the polymer layer being bonded to said film layer.**

*Procida* appears to describe a flexible, unbonded continuous high-pressure pipe comprised of several layers comprising at least one inner barrier layer, at least one tubular, liquid-permeable reinforcement layer surrounding the barrier layer, and a tubular outer sheath surrounding the tubular reinforcement layer(s), wherein at least one liquid-impervious barrier layer is provided by continuous extrusion of a single-phase aliphatic polyketone polymer, and a method for the production thereof (abstract). In the description it is mentioned that the inner barrier may comprise several layers [33] and also it is mentioned that such layers may be co-extruded [62].

It is not mentioned that such layers of the inner barrier could be bonded to each other. Neither is anything mentioned about permeability properties. Furthermore, nothing is mentioned about the selection of thickness and what is achieved by this selection of thickness of respectively the polymer layer and the film layer.

*Procida* fails to remedy the deficiencies of *Hardy*. *Procida* appears to disclose a process for manufacturing a flexible tubular conduit having an internal impervious jacket made of polyolefin and at least one armoring layer, wherein said process comprises crosslinking said internal jacket by hydrolysis reaction.

Even though the pipe described in *Procida* is described to be a layered pipe, nothing is mentioned about a polymer layer and a film layer applied one above the

other. In fact one of the essential features in the process described in *Procida* is that both sides of the polyethylene layer should be uncovered or merely covered with a non-impervious layer (*Procida*, col. 7, line 39 – col. 8, line 3). The only example of a non-impervious layer is a layer provided by helical winding of a doubly-fastened profiled metallic band. Such a non-impervious layer is clearly not a film, it is much thicker than 1 mm and it is not bonded to the polymer layer. Further more since it is non-impervious it will not provide a barrier against any of the fluids methane, hydrogen sulphides, carbon dioxide and water.

We cannot see anything that would prompt the skilled person to combine any features of these two prior art publications. Even if the skilled person should combine features of the two prior art citations, he would not know which features to combine and for which purpose and furthermore several features as explained above are not even mentioned in any one of the documents.

The invention of the present patent application relates specifically to flexible, unbounded pipe useful for the transportation of aggressive fluids. The flexibility of such pipes is very important, in particular since such pipes are transported in long lengths from production site and to offshore installations. Accordingly it is essential that the pipe can be transported on a reel. The invention provides a large contribution to the art by providing a pipe which can have both a high flexibility and high stability towards corrosion.

According to the invention it has thus been found that by providing a relatively thin high barrier film and a much thicker polymer layer with lower barrier properties where the film and the polymer are bonded to each other, the object of the invention is

achieved. Since the film is very thin it does not have any essential influence on the flexibility of the pipe, and simultaneously it has been found that the risk of creating gas pockets between the layers is highly reduced.

Nothing in the other cited documents comprises any teaching which would lead the skilled person to modify the pipe disclosed in any one of the cited prior art documents to a pipe of the present invention.

The second error in the restriction requirement made by the Examiner is that method Claim 39 specifically refers to product Claim 1 and therefore comprises the features of Claim 1. Accordingly, the stated reason that Groups I and II do not relate to a single inventive concept under PCT Rule 3.1 is not present, and the restriction requirement should be withdrawn.

For the foregoing reasons, the applicant respectfully requests that the restriction requirement be withdrawn and that examination on the merits take place with respect to Groups I and II.

## II. Election of Species Under 35 U.S.C. §121

In the Office Action, the Examiner has required an election of a single disclosed species from six patentably distinct species and two sub-species. The Examiner stated that Claims 1, 50-51, and 53-54 are generic claims and that a single disclosed species must be elected for examination. Should the Examiner find Claims 1 and 39 to be allowable, Applicants expect all of the dependent claims directed to all alleged species to be examined and allowed with the generic claim. In order to be responsive to the

Office Action, Applicant provisionally elects with traverse to prosecute Species B and Sub-Species X with reference to the traversal articulated in Section I.

III. Conclusion

In view of the foregoing remarks, Applicant respectfully requests the reconsideration and reexamination of this application and the timely allowance of the pending claims. The preceding arguments are based only on the arguments in the Office Action, and therefore do not address patentable aspects of the invention that were not addressed by the Examiner in the Office Action. The claims may include other elements that are not shown, taught, or suggested by the cited art. Accordingly, the preceding argument in favor of patentability is advanced without prejudice to other bases of patentability. Furthermore, the Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 13-2725.

Respectfully submitted,  
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Date: August 20, 2009

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